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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,632	11/21/2003	Victor Verbinski	SAIC0055-CCIP2	9218

27510 7590 01/26/2006

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EXAMINER	
GAGLIARDI, ALBERT J	
ART UNIT	PAPER NUMBER
2884	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/717,632	VERBINSKI ET AL.	
	Examiner	Art Unit	
	Albert J. Gagliardi	2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) *9-23* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *varied*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-8, drawn to a target object inspection system including at least radiation source and a boom connected to a mobile platform, classified in class 250, subclass 360.1.

   II. Claims 9-14, drawn to dual mode inspection system including a least an image processor connected to first and second detectors, classified in class 250, subclass 369.

   III. Claims 15-23, drawn to a method for inspecting a target object including at least, classified in class 250, subclass 362.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and III and invention II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility in any of a variety of applications wherein both active and passive imaging is desired, while inventions I and III have separate utility for any of a variety of applications wherein it is desired to distinguish between different sources of radiation, regardless of whether or not images of the two sources are desired. See MPEP § 806.05(d).

Inventions III and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice

another and materially different process. (MPEP § 806.05(e)). In this case, the process may be carried out by a non-mobile apparatus not including a boom.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Dawn-Marie Bey on 19 January 2006 a provisional election was made without traverse to prosecute the invention of Group 1, claims 1-8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

6. The information disclosure statement filed 8 April 2004, 17 May 2004, 11 January 2005, and 29 June 2005 fail to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because some of the references do not include either a date of publication, or a statement that the references constitute prior art. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement

or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bermbach *et al.* (US 5,065,418) in view of Adams *et al.* (US 2004,0086078 A1).

Regarding claim 1, *Bermbach* discloses (Figs. 1-2) a target object inspection system comprising: a first detector (13) for detecting radiation from a radiation source (8); a mobile platform (1) including the first detector (13) and the radiation source (8); and a boom (9) connected to the radiation source (8) and the mobile platform (1), wherein the boom is deployed

so as to effect passage of the target object between the radiation source and the first detector (see generally fig. 2).

Regarding the use of a second detector for detecting radiation from the target object, the examiner notes that passive detection of radiation emitted from target objects is well known. In addition, *Adams* discloses an arrangement comprising both active target inspection including a radiation source and passive sensing of radioactive or fissile materials (¶¶ 0002-0004) wherein the passive sensing may be performed by a second detector (¶ 0007). *Adams* teaches (as is also well known) that such a combination is advantageous (¶ 0004). Therefore it would have been obvious to a person of ordinary skill in the art to modify the invention suggested by *Bermbach* to further include a second detector for detecting radiation from the target object so as to allow for a more advantageous combination system as suggested by *Adams*.

Regarding claim 2, *Bermbach* discloses that the first detector is photon (i.e., x-ray) detector.

Regarding claim 3, in the system suggested by *Bermbach* in view of *Adams*, *Adams* discloses that the second detector is a neutron detector (¶ 0007).

Regarding claim 4, *Bermbach* discloses that the first detector (13) detects radiation from the radiation source (8) after the radiation passes through the target object (5) (see generally Fig. 2).

Regarding claim 5, although *Bermbach* specifically identifies the source is an x-ray source, those skilled in the art appreciate that x-ray sources and gamma source are well known as functionally equivalent sources for purpose of generating high energy photons for inspection purposes, and absent some degree of criticality, the substitution of a gamma source for an x-ray source is considered a matter of routine design choice depending on the needs of the application.

Regarding claim 6, although not specifically disclosed, those skilled in the art appreciate that helium based neutron detectors are well known and, absent some degree of criticality, would have been a matter of routine design choice.

Regarding claim 8, in the system suggested by *Bermbach* in view of *Adams*, *Adams* discloses that the detection of neutrons can result in an alert (¶ 0027). The use of an indicator to signal the presence of an alert would have been an obvious, if not inherent design choice.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Bermbach* and *Adams* as applied above, and further in view of Kubierschky (US 4,893,015).

Regarding claim 7, *Bermbach* discloses that the system includes a system for processing signals collected from the detector and calculating an image in known manner (col. 3, lines 36-46) and a display (27) responsive to the collected signals and generating a display (col. 3, lines 46-55). Regarding the processing of signals including a counter for discretely counting photons, *Kubierschky* discloses that typical methods for detecting and measuring radiation can include a discrete photon counting mode (col. 1, lines 39-42). Therefore, absent some degree of criticality, it would have been obvious to a person of ordinary skill in the art to specify that the system includes a counter for discretely counting the photons so as to allow for the processing of signals from the radiation detectors in a known manner.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert J. Gagliardi whose telephone number is (571) 272-2436. The examiner can normally be reached on Monday thru Friday from 10 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Albert J. Gagliardi
Primary Examiner
Art Unit 2884

AJG